# 85<sup>th</sup> Legislative Session – 2010

Committee: Joint Appropriations Tuesday, January 26, 2010

P - Present

E - Excused

A - Absent

### Roll Call

- P Ahlers
- P Burg
- P Bartling
- P Dennert
- P Hundstad
- E Wismer
- P Novstrup (Al)
- P Brown
- P Carson
- P Deadrick
- P Peters
- P Wink
- P Haverly
- P Putnam
- P Hunhoff (Jean), Chair
- P Tidemann, Vice-Chair

# OTHERS PRESENT: See Original Minutes

The meeting was called to order by Senator Jean Hunhoff.

# **Department of Education**

**Mr. Thomas Oster**, Secretary for the Department of Education (DOE), provided an overview of the DOE's initiatives, success measurements, stimulus funds, and challenges. Electronically distributed was a document outlining these items. (**Document #1**)

# High School 2025

One initiative of the DOE is High School 2025, which centers around the four R's:

- Relevance new minimum graduation requirements, personal learning plans for all students, and program opportunities;
- Relationships career guidance and using teachers as advisors;
- Rigor new graduation requirements, project-based learning, Project Lead the Way, advanced placement, and dual credit courses; and
- Results 89.21% graduation rate and 72.1% of graduates attending postsecondary education.

### South Dakota Virtual School

Secretary Oster said that the South Dakota Virtual School is another department initiative. The South Dakota Virtual School is a clearinghouse for online, distance courses that have been approved by the DOE. The purpose of the South Dakota Virtual School is to provide courses that meet scheduling conflicts, advanced work, expanded offerings, and credit recovery for students. This project started in the spring of 2007 with 60 courses offered. By the summer of 2010, all required courses for graduation will be available.

Senator Hunhoff requested a breakdown of the program demographics, cost, and method of class offering (DDN or web-based).

# South Dakota Incentives

The South Dakota Incentives plus program is a pilot project designed to learn more about performance-based compensation in schools. There are 10 school districts that are participating in the pilot program – mostly rural and west river districts. The project incorporates a financial incentive system that targets teachers, paraprofessionals, and principals. The staff will receive financial incentives based on school wins and gains in student achievement and involvement in capacity-building professional development.

Secretary Oster noted that South Dakota is in the third year of the five-year grant. Today, more than \$2 million has been awarded to the staff. More than 60% of participating schools received school-based awards. No general funds have been appropriated to this program. If the federal funds are removed, the state will need to discontinue the program due to the lack of state general funds.

### **GEAR UP**

The Gain Early Awareness and Readiness for Undergraduate Program (GEAR UP) has been around for many years. The program targets mainly American Indian students and prepares them for the rigors of postsecondary education. Since the beginning, 87% of the GEAR UP graduates pursue postsecondary education and 65% of the graduates have graduated from or are still attending postsecondary education.

Secretary Oster explained the Race to the Top program. It was created to help American Indian students in grades 9-14. One main component of the program is that the students in the program go back to their communities and become models for the future students by being active in the community and succeeding in life and school.

Representative Putnam requested the demographics or case study showing the progression and dropout rates for GEAR UP.

Secretary Oster informed the committee that the DOE is eligible to apply for federal funds in the amount of \$25 million to \$70 million. Originally, the federal government required a charter school as part of the application; however that requirement was changed. The application deadline was January 19, 2010. Of the 41 applications, 5 to 7 will be selected and funded.

In response to Senator Hunhoff's question, Secretary Oster said that the state could receive a \$73 million grant to be used for four years. No general funds are needed.

### **Library Development**

The South State Library offers a "virtual library" through the online database. The virtual library targets over 50 databases and research tools. The State Library obtained \$223,000 in funding from the Gates Foundation to support new technology in 26 qualifying libraries across the state. The grant will provide 86 new computers in 2010 including software and training.

Secretary Oster told the committee that the State Library partnered with Montana, Wyoming, and Idaho to obtain a \$700,000 Laura Bush grant to promote professional growth for South Dakota schools and public libraries.

### **Technical Institutes**

Secretary Oster said that the DOE, Board of Education, and four technical institutes are becoming a unified system with a strategic plan for the future. The technical institutes have established a model for funding based on FTEs (30 credit hours) and per-student allocation. The funding model is similar to the K-12 funding formula. The distribution of the funds to each technical institute is still being determined. The issue will be addressed at the Board of Education's rules hearing in March.

### Dakota STEP

The Dakota STEP is a state test required by the No Child Left Behind (NCLB) Act. The goal of NCLB is to have all children be at 100% proficiency or advanced by 2013. Since the test was implemented in 2003, South Dakota has increased from 59% to 75% in math and from 74% to 75% in reading.

Secretary Oster noted that the percent of Native American students scoring proficient or advanced is well below the "All Student" group percentage. In 2009, Native American students scored 44% in math and 50% in reading.

Representative Wink asked about a comparison of South Dakota test score to the rest of the nation. Secretary Oster responded that the ACT and National Assessment of Education Progress (NAEP) test scores are compared nationally. However, the Dakota STEP, which is used for NCLB, is not comparable nationally since there are 50 different sets of standards and assessments. Although the DOE does not want the federal government deciding what teachers in South Dakota should teach, one set of national standards would allow for a comparison.

#### ACT

The state's ACT composite scores have risen consistently in recent years – from 21.5 in 2005 to 22.0 in 2009. The percentage of students in the state taking the test has also increased to 74.5%, which is higher than the national average of 44.6%

### National Assessment of Educational Progress

Secretary Oster informed the committee that the NAEP test is the only test that compares students across the nation with the same test. The 2009 math results show that South Dakota students scored higher than the national average for grades 4 and 8. Only 10 states scored significantly higher at the 4<sup>th</sup> grade level and only 4 states score significantly higher at the 8<sup>th</sup> grade level than South Dakota.

Representative Dennert requested a listing of the states that scored better than South Dakota. The department reported that North Dakota, Minnesota, Vermont, and Massachusetts scored higher than South Dakota.

### **Graduation Rate**

The 2009 graduation rate in South Dakota was 89.21%. Currently, 72.1% of the high school graduates continue on to postsecondary education.

Representative Burg asked about any problems from the new requirement of students remaining in school until age 18. Secretary Oster responded that there are more students in the schools as a result of the change. However, the schools have not experienced the problems or issues as first anticipated.

Senator Novstrup asked about a comparison of South Dakota students to students internationally. Secretary Oster commented that the United States teaches all students whereas some other countries only teach a select few, so the comparisons are not always correct.

Secretary Oster noted that many other countries test students every other year and make the test results high stakes for the students. South Dakota only tests students in grades 3, 8, and 11. The

test scores in grade 11 are usually lower because the students know the results are not high stakes. Secretary Oster explained some possible options to make the test results high stakes for the students.

#### American Recovery and Reinvestment Act (ARRA)

Last session, the State Fiscal Stabilization Fund dollars were used to support state aid. Other than the State Fiscal Stabilization Fund dollars, the largest amount of stimulus funds to the DOE have gone to the schools through the existing formula programs – Title I and special education. The stimulus funds were used in lieu of state general funds.

For FY10, the regular statewide Title I allocation was \$38.5 million and the Title I ARRA allocation was \$33.5 million for a total statewide Title I allocation of \$72.1 million. The regular statewide Special Education Part B allocation was \$29.9 million and the special education Part B ARRA allocation was \$33.1 million for a total statewide special education Part B allocation of \$63 million.

Secretary Oster noted that the DOE has submitted two bills this legislative session regarding Special Education funding that will help school districts spend the extra ARRA Special Education dollars.

In response to Representative Burg's question, Secretary Oster said that the DOE received too much federal funding in certain areas and not enough funding in other areas. He provided the example of the additional special education funds.

Representative Burg asked if the two bills proposed this session will address the special education funding issue. Secretary Oster responded that one of the proposed bills has an emergency clause because the federal funds need to be spent by July 1 or the funds will revert. The other bill changes the current South Dakota law by allowing computers to be purchased from special education funds.

Some of the challenges the DOE face include;

- Increased federal monitoring and reporting requirements;
- State report card timeline;
- Consolidated applications;
- Native American education;
- Technology in schools; and
- Maintaining a statewide system of support as required by NCLB.

Secretary Oster stated that the DOE has made an application to the federal government to change the n size of special education classes from 10 to 30. This change will help the schools meet the required benchmarks based on IEP evaluations.

Representative Putnam asked about a change to the N size in the formula. Secretary Oster said that the N size will not guarantee that all schools will have that many students. However, a change in the N size will dramatically help special education students and how the students are counted.

Senator Brown asked if small schools would be removed from the process due to the change. Secretary Oster stated that the DOE has been hesitant because it does not want to remove every school with less than 30 students per grade. The federal government does allow some states to use multiple year data for special education.

Representative Burg asked about methods to keep the Native American students interested in school. In response, Secretary Oster listed two hurdles -(1) getting the children to attend school on a consistent basis, and (2) needing to have the students interest level peaked so they want to be in school and tell the parents the same.

Senator Hunhoff asked about funding for schools on the reservation. Secretary Oster said that there are no South Dakota public schools on the reservations. The Bureau of Indian Education funds the schools located on the reservations.

Senator Hunhoff requested data for the three different types of schools including the graduation rates.

Distributed to the committee was the "GEAR UP South Dakota: 2008-09 Formative Evaluation". (**Document #2**)

### FY 2011 Budget Request

For FY11, the Governor recommends a total appropriation of \$660,685,401 and 138.0 FTEs for the Department of Education. This is a decrease of \$17,428,792 in total funds. The recommended change is comprised of a decrease of \$9,666,927 in general funds, \$7,903,826 in federal fund expenditure authority, and an increase of \$141,961 in other fund expenditure authority.

Distributed to the committee was a document outlining the DOE's FY11 budget request. (**Document #3**)

General funds within the department's budget consist mostly of aid to schools and funding required to run federal programs. Currently, 91.48% (\$365,465,207) is directed to K-12 state aid and 5.62% (\$22,464,229) is directed to technical institutes. The remaining 2.9% of the budget is directed to the NCLB Assessment, federal match dollars, and ESA's.

Representative Wink asked about the funding for the NCLB assessment. Ms. Tamara Darnall, Director for the Office of Finance and Management, said that DOE received federal funds for the

tests. The \$1.9 million in general funds covers the difference from what the federal funds do not cover.

Ms. Darnall stated that the federal fund decrease of \$7.9 million is to align the ARRA funds with actual expenditures.

Senator Hunhoff asked about the \$141,961 other fund increase. Ms. Darnall said that the increase is for space billing, Bureau of Information and Telecommunication (BIT) billing change, employer portion of the state health plan, and a few minor grants in education services and support.

Representative Peters requested a breakdown of the other fund revenues by department.

Senator Ahlers asked about the travel budget. Ms. Darnell responded that the travel budget has not changed. The travel budget is funded primarily with federal funds with a small portion in general funds. The majority of the budget is used to visit the public schools for the compliance checks.

Representative Dennert asked for a breakdown of the travel budget for FY10 based on funding type.

#### General Administration

For FY11, the Governor recommends total funding of \$9,979,228 for the General Administration. This funding consists of \$2,068,118 from the general fund, \$7,897,394 in federal fund expenditure authority, \$13,716 in other fund expenditure authority, and 36.5 FTEs. The FY11 funding is \$173,961 more from the general fund, \$97,085 more in federal fund expenditure authority, \$42 more in other fund expenditure authority, and 2.0 FTEs over the FY10 budget.

The budgetary changes to the general administration include:

- Increase of \$88,909 and 2.0 FTEs for the Statewide Longitudinal Data System Grant;
- An increase of \$151,101 for space billing zero-based the central space to reflect the move to the state library and used a rate of \$11.78 per square foot;
- An increase of \$16,494 for the BIT billing the billing rate increased from \$105 to \$107 per account; and
- An increase of \$14,584 for the employer portion of the state health insurance plan.

In response to Senator Hunhoff's questions, Ms. Darnall stated that the DOE currently does not have a statewide longitudinal data system, but the state has a statewide student information system.

The DOE applied for a statewide longitudinal data system grant last year, but was declined. Another grant opportunity appeared this year to fund this system. If the DOE does not get the grant this year, other funding methods need to be found because the DOE signed for the Phase 2 ARRA dollars and needs to meet those requirements. Secretary Oster said that the worst case scenario is that the data system will need to be created with the DOE funds or the current law will need to be changed.

Representative Peters asked about Phase II of the stimulus funding. Ms. Darnall explained that the stimulus funds were awarded to the state in two phases. To obtain the Phase II funds, the state needed to submit detailed documentation that meets the assurances or a plan to meet the assurances. If the goals are not met, the state will lose \$40 to \$50 million for the K-12 system.

In response to Senator Hunhoff's question, Ms. Darnall stated that the one additional FTE may be requested by the DOE in FY12 to help manage the new data system. The BIT may need one to two additional FTEs to manage the data system, and the Board of Regents may need one FTE also.

Representative Deadrick and Senator Brown asked about future funding for the data system and FTEs. Ms. Darnall agreed that general funds will be needed in the future to fund the data system, FTEs, and to license the software. The total general fund cost will be about \$750,000 for the FTEs and software licenses.

Senator Hunhoff requested a breakdown of the grant, agencies involved, projected FTEs, and funding type. Ms. Darnall stated that the DOE will provide the budget submitted with the grant application.

Representative Peters requested detailed information for the individual programs in the Division of General Administration budget.

Ms. Darnall announced that the DOE will be able to move to the State Library during June and July 2010. The DOE will still have a space billing payment for Kneip Building and State Library space for the first part of FY11. The reason for the two payments in July is that the department will not get billed for April, May, and June until July. The DOE will be charged for the space occupying in the Kneip building and the State Library.

# State Aid

For FY11, the Governor recommended appropriation is \$392.4 million; which is a decrease of \$9,405,198 from FY10. State Aid to Education traditionally consists of a number of individual programs, which are appropriated as line items in the General Appropriation Act, while there may be a change in the list of items from one year to the next. The following items comprise the Governor's State Aid to K-12 Education recommended appropriations for FY11: State Aid to

General Education, State Aid to Special Education, Sparsity Payments, School Consolidation Incentives, and Technology in Schools.

Budgetary changes to the state aid include:

- A decrease of \$3,817,994 for the per student allocation for the state aid to general education based on a 0.0% increase;
- A decrease of \$4,057,234 for freezing the levies at pay 2010 levels;
- A funding swap of \$235,333 to general funds based on the amount of state fiscal stabilization funds remaining for FY11;
- A decrease of 4,063,352 for the 0.0% increase for state aid to special education for payments by the disability level;
- An increase of \$1,836,328 for sparsity payments to spare school districts;
- An increase of \$785,446 for consolidation incentives payments to school districts that have consolidated; and
- A decrease of \$88,392 for technology in schools an other fund expenditure authority reduction for the second and third year obligation of the Classroom Connections Program.

Senator Hunhoff asked about new consolidated districts. Ms. Darnall stated that Colome and Lemmon/Northwestern consolidated and the incentive payments are included in FY11. Currently, consolidation efforts are occurring between Rosyln, Langford, and Webster school districts and consolidation efforts between Emery and Bridgewater.

In response to Representative Burg's questions, Secretary Oster said that the consolidation incentive is not enough to instigate consolidation, but it does ease the transition. Most of the consolidations occurred from the 100 minimum enrollment law.

Senator Hunhoff requested information showing that the consolidation incentives were used for the transition.

Senator Hunhoff also requested a list of all the schools that have consolidated.

In response to Senator Hunhoff's question, Ms. Darnall stated that the DOE has enough money in the Citi Bank fund to pay for the Classroom Connection schools that made a commitment. Once those payments are made, the program is eliminated.

Senator Haverly requested a breakdown of fund 3138.

State Aid to General Education

For FY11, the Governor's recommended appropriation for State Aid to General Education for K-12 is \$337,873,868, which is a decrease of \$7,875,228 from the FY10 level. This recommended appropriation is \$313,431,221 from the general fund and \$24,442,647 from federal ARRA funds.

Ms. Darnall stated that the estimated fall enrollment of 122,742 students included in the Governor's FY11 recommended budget is underestimated by 623 students. In response to questions on how an underestimation of this size could have happened, Ms. Darnall explained the process by which the fall enrollment numbers are verified.

In response to Senator Ahlers' questions, Secretary Oster said that part of the system problem is human error.

Senator Haverly asked about the 623 student recalculation. Ms. Darnall said that there was extraordinary growth in unanticipated areas. There was an additional 623 students over the extra 500 that were previously added to the formula; which means South Dakota increased the student population by almost 1,200 students this year.

Secretary Oster commented that the additional students can be a result of new growth in areas and the requirement to remain in school until age 18.

Representative Dennert asked about an overestimation. Ms. Darnall responded that the DOE did not have firm numbers at the time the budget was created and presented to the Governor. The funding is based on the enrollment numbers on the last Friday in September.

Representative Deadrick asked about the infinite campus. Ms. Darnall stated that the infinite campus will cost the state \$1.4 million annually.

Representative Peters requested a list of the increased enrollments per district.

In response to a question posed by Representative Peters, Ms. Darnall stated that the difference of students age 17 and 18 enrolled this school year has increased by 370 students compared to last school year.

The committee discussed the additional 623 students that will need to be included in the 2010-2011 state aid fall enrollment.

Ms. Darnall told the committee that the state will need to add \$3.7 million to the state aid to general education budget to meet the required need.

### State Aid to Special Education

A total appropriation of \$42,732,190 from the general fund is the Governor's recommendation for State Aid to Special Education for FY11. This amount represents a decrease of \$4,063,352 (8.7%) from the appropriation for FY10.

Ms, Darnall explained the FY10 and FY11 state aid to special education estimates. The total amount of funds remaining at the end of FY10, which can be rolled over to the FY11 budget, is estimated to be \$6,658,175. Due to new federal laws, the state maintenance of effort funding for special education cannot be lower than the previous year's funding. For FY11, a decrease of \$4,063,352 is requested from the state aid to special education budget.

Ms. Darnall noted that Senate Bill 47 will request the amount to be carried over to FY11 for the state aid to special education.

The extraordinary cost fund has a higher estimated need for FY11 because the fund will be used more again next fiscal year. Secretary Oster said that part of the increased cost is a result of the ARRA funding. For FY10, schools had to use the stimulus money before accessing the state extraordinary cost fund. There will be an increase to the extraordinary cost fund use when the stimulus funds are gone.

Ms. Darnall stated that the state aid to special education is paid to districts based on child count.

In response to Senator Hunhoff's question, Secretary Oster explained that the DOE provides special education services to children from age 4 to 21.

#### **Sparsity Payment**

In 2006, the Legislature approved the Sparsity Payment Program that addresses the unique challenges faced by extremely rural, isolated schools. For FY11, the recommended allotment for the sparsity payment is \$1,836,328, which is an increase of \$126,137 from FY10. Approximately 23 districts will receive the sparsity payment in FY11.

### **Consolidation Incentives**

In 2001 the Legislature approved legislation that provided an incentive payment for school districts who voluntarily consolidated. This program has traditionally been funded through a special appropriation, but has now been added to the General Appropriations Act as an ordinary expense of state government.

For FY11, the amount allotted for the consolidation incentive is \$785,446, which is a decrease of \$368,847 from FY10.

### Technology in Schools

For FY11, the Governor recommends funding for the technology in schools program in the amount of \$9,200,777, a decrease of \$88,392 (1%) from FY10. This program provides state

funding to support the Dakota Digital Network, email, internet access to student databases for school districts, and distance education in South Dakota.

Ms. Darnall explained that page 21 of Document #3 lists the estimated reoccurring budget need for the technology in schools. The total need is estimated to be \$8,298,903.

### K-12 Technology

Ms. Darnall said that the total FY11 estimated costs to the K-12 technology budget is \$9,00,777, comprised of the recurring expenditures (\$8,298,903), replacement and upgrades (\$600,777), and Classroom Connections Year 2 and 3 (\$301,097).

The projected E-Rate revenue for FY11 is \$2 million. Other FY11 funding for the K-12 Technology consists of \$301,097 in Citibank funds and \$219,658 in grants and donations. The FY11 general fund need is \$6,680,022.

Senator Hunhoff asked about webcasting. **Mr. Jim Edmund**, Bureau of Information and Telecommunications, said that video conferencing is a two-way voice and video conferencing system; whereas the webcasting is a one-way conferencing system. He is unaware of public high schools using the webcasting since the course would be taught by a video being placed on the internet for a student to view.

Senator Hundstad requested a cost benefit of using the DDN.

Representative Peters requested an update on the Education Assistance Corporation Grant. Ms. Darnall stated that the DOE was given \$175,000 for two to three years. The amount needs to be requested each year and was reduced to \$75,000. This fund can be located in company 3138.

# **South Dakota Science and Technology Authority**

Mr. Ron Wheeler, Executive Director of the Sanford Underground Laboratory, distributed to the committee a PowerPoint presentation (**Document #4**). He informed the committee of the South Dakota Science and Technology Authority's (SDSTA) four major goals. They include:

- Rehabilitate the underground mine with the resources available;
- Develop staff and programs that could transition into a national laboratory;
- Develop the Sanford Underground Laboratory at the 4,850 level; and
- Initiate education and outreach.

The underground mine is being dewatered and the current level is 5,070 feet. Sand filters are being used to remove the iron from the water. Mr. Wheeler said that SDSTA has spent lots of funds to ensure the laboratory is in compliance with environmental permits.

In response to Representative Wink's question, Mr. Wheeler stated that the SDSTA is currently pumping 800 gallons of water per minute out of the mine. He hopes to increase the pumping back to the 1,500 gallon per minute level.

The 4,850 level for the laboratory was reached on May 13, 2009. The Sanford Underground Science and Engineering Laboratory at Homestake was dedicated on June 22, 2009.

Mr. Wheeler informed the committee that the contract with Dyna Tech was canceled because SDSTA could perform the services cheaper in-house. The Yates Shaft was refurbished and the Davis Cavern was emptied. The Davis Cavern will become the location of the Sanford Underground Laboratory and construction on the project as started.

Some of the upgrades made to the mine include:

- Ventilation replaced fans with new reversible fans required by OSHA regulations;
- Electrical replaced equipment that was installed in the 1930's; and
- Data infrastructure connected to the REED Network and Internet2.

Early underground science projects have started. Some of the projects include – low-background counts, gravity waves, geological mapping, biological sampling, and tiltmeters.

In response to Senator Hunhoff's question, Mr. Wheeler said that the SDSTA is not accepting any more applications for early underground science projects. During the application process, letters of interest was sent to the SDSTA for review. The SDSTA selected the projects that could be hosted in the underground laboratory based on merit. The National Science Foundation (NSF) funds most of the experiments.

The LUX surface laboratory is completed. It contains a three-story detector pit and a clean room. The LUX laboratory will be used to detect dark matter.

Mr. Wheeler stated that the SDSTA has been involved in education and outreach programs by continuing to conduct workshops for teachers and students. Some of the programs were the Neutrino Day, the Davis-Bahcall scholarship program, deep science for everyone lectures, and a facility tour for the GEARUP group.

Representative Burg asked about a construction timeline for the Sanford laboratory. Mr. Wheeler stated that construction will last through the summer of 2010. After construction, outfitting will take several months. The LUX and Majorana projects are scheduled to start in September or October 2010.

Senator Haverly asked about NSF funding. Mr. Wheeler responded that there is no guarantee that SDSTA will receive NSF funding in May 2011.

The Conceptual design Report dated January 9, 2007, called for construction of an approved MREFC to begin in October 2010. The SDSTA had sufficient funds for the project at that time. Mr. Wheeler explained that there is no legal precedent for the NSF to fund operations at the Sanford Underground Laboratory until there is an approved MREFC because legally the project does not exist. The National Science Board will not be considering approval of an MREFC until May of 2011.

In response to Senator Haverly's questions, Mr. Wheeler said that the US Department of Energy and Office of Science and Technology Policy can legally fund operations, but he is not certain it will occur until the project receives MREFC approval. If the NSF approved the project in May 2011, construction would not start for another two years.

Shown to the committee was a slide of last year's appropriation to SDSTA. It was projected that the SDSTA would be short \$7.8 million in FY11. However, the SDSTA now estimates a shortfall of \$5.4 million.

The total estimated monthly cost to continue operating the SDSTA is \$896,000; consisting of \$139,000 in administration costs and \$757,000 in operational expenses. There are 9 FTEs reported in the administration budget and 66 FTEs reported in the operations budget. The bulk of the personal is in the operations and maintenance area. The SDSTA is not able to reduce the FTEs in this budget otherwise would have liability problems because two shifts need to be working so people can operate and maintain all the equipment.

Mr. Wheeler stated, in response to Senator Hunhoff's question, that scientists who are new to the Sanford Underground Laboratory receive an escorted tour throughout the facilities. They also work through any safety implications of their experiments.

Mr. Wheeler reminded the committee that there is no guarantee that the NSF will approve the project. However, he noted high support from the science community, the Office of Science and Technology Projects in the White House, the US Department of Energy, and Congress.

In response to Representative Putnam's concern, Mr. Wheeler stated that if the NSF funds a national underground laboratory, it will be at the old Homestake Mine. However, there is no guarantee it will be approved.

The US Department of Energy has invested \$36 million in the underground laboratory consisting of \$10 million in the Fermi Lab DUSEL accelerator, \$6 million in the Majorana at Sanford Lab, and \$20 million in plans for upscaled Majorana. The NSF has invested over \$80 million in the underground laboratory. The NSF investment is comprised of:

- DUSEL conceptual design \$1 million;
- DUSEL preliminary design \$47 million;

- DUSEL experiment design \$25 million;
- DUSEL environmental impact \$5 million; and
- LUX and other experiments over \$2 million.

If the NSF does not approve the underground laboratory, it will be very difficult for the State of South Dakota to operate the Sanford Underground Science and Engineering laboratory as a state facility. State tax dollars will not be able to solely support the facility. Most likely, the facility would have to be shut down or the US Department of Energy may want to use the location for a more narrowed purpose.

Mr. Wheeler said that if the NSF approves the underground laboratory, the facility construction is expected to cost a minimum of \$500 million. The economic impact to the state for both construction and ongoing operations would be huge, because people will be employed in the state for 5 to 8 years for construction. The impact on the educational system would be transformational.

Senator Hunhoff asked about future state funding for SDSTA. Mr. Wheeler explained that the current view is that the NSF would provide operating funds through a cooperative agreement with either the University of California Berkeley and/or SDSM&T, who in turn would either contract with the SDSTA to operate the Sanford Laboratory or contract with a new operating company. In the event a new company was contracted to operate the lab, then the SDSTA would lease the facility to the University given the cooperative agreement. In either event, the SDSTA would ensure that the lease/operating contract would cover all expenses including insurance and administrative costs so the SDSTA would not require future funding from the legislature for this project.

Representative Burg asked about the possibility of spin-off companies from the development of the underground laboratory. Mr. Wheeler responded that the underground laboratory will attract people with high level of degrees and skills. It is most likely spin-offs will occur.

Senator Hunhoff asked about the future funding of the underground laboratory. Mr. Wheeler stated that he would encourage the state funding the \$5.4 million for FY11. South Dakota has used lots of resources for this project, but should not let the project drag out too long.

Mr. Wheeler stated, in response to Mr. Wheeler, that there are no funds left from the Sanford donation.

Senator Hunhoff asked about the timeframe after approval of NSF funding. Dr. Richard Gaitskell with Brown University said that there is nothing unusual with the timeframe for a federal project valued over \$500 million. It can take 15 years or longer to establish a large laboratory with

immense scrutiny. The federal government is focused on ensuring the project can be completed within the budget presented.

Representative Tidemann asked about the money that will need to be allocated for the closure of the mine. Mr. Wheeler responded that that state has already allocated \$10 million in an indemnification fund and \$2 million in mine closure fund. A closure plan needs to be developed in advance to prevent a need for additional funds later.

Mr. Wheeler announced that the National Science Board will be conducting the annual retreat in Lead, SD in November 2010.

MOTION: ADJOURN

Moved by: Haverly Second by: Deadrick

Action: Prevailed by voice vote.

Lisa Shafer \_\_\_\_\_\_ Jean M. Hunhoff, Chair